# IN THE INITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Patent Application of

Conf. No.: 3945

STEVENS et al

Atty. Ref.: RYM-36-1887

Serial No. 10/525,381

TC/A.U.: 2168

Filed: February 23, 2005

Examiner: Garrett A. Smith

For: MEDIA ARTICLE COMPOSITION

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December 20, 2010

Mail Stop Appeal Brief - Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### **APPEAL BRIEF**

Sir:

Appellant hereby **appeals** to the Board of Patent Appeals and Interferences from the last decision of the Examiner.

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## (I) REAL PARTY IN INTEREST

The real party in interest is British Telecommunications public limited company, a corporation of the country of Great Britain.

## (II) RELATED APPEALS AND INTERFERENCES

The appellant, the undersigned, and the assignee are not aware of any related appeals, interferences, or judicial proceedings (past or present), which will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

## (III) STATUS OF CLAIMS

Claims 22-33 are pending and have been rejected. No claims have been substantively allowed. Claims 1-21 have been canceled. The rejections of claims 22-33 are being appealed.

## (IV) STATUS OF AMENDMENTS

No amendments have been filed since the date of the Final Rejection.

#### (V) SUMMARY OF CLAIMED SUBJECT MATTER

A listing of each independent claim, each dependent claim argued separately and each claim having means plus function language is provided below including exemplary reference(s) to page and line number(s) of the specification.

22. A method of automatically composing a media article (pg. 22, ll. 20-30) according to a template (Fig. 6) specifying the desired characteristics of the media article and having a plurality of sections ("Section" in Fig. 6), at least one of which contains a query ("Query" in Fig. 6; pg. 16, ll. 6-14; pg. 17, ll. 6-20), the method (Fig. 8, pg. 16, ll. 34 - pg. 17, l. 4) comprising:

iteratively (steps 62-75 of Fig. 8; pg. 17, ll. 24-30) finding each section in the template and executing any query (step 62 of Fig. 8; pg. 17, ll. 24-30) in that section to return a selection of media objects each of which is associated with a corresponding media element and comprises digital metadata about its respective media element; and (step 64 of Fig. 8; pg. 17, l. 32 - pg. 18, l. 30)

analyzing the digital metadata of the selected media objects (step 66 of Fig. 8; pg. 18, 1. 31 - pg. 20, 1. 7), which digital metadata includes:

related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects (pg. 2, l. 24; pg. 3, ll. 13-14), and

relationship data which indicates the type of relationship between what is represented by the respective media elements corresponding to the related media objects (pg. 2, ll. 25-27; pg. 3, ll. 13-14; Figs. 4A-5);

wherein the method further comprises arranging (steps 68-70) the media elements associated with the selected media objects, or identifiers thereof, in a media article in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis (pg. 20, l. 9 - pg. 21, l. 3).

27. A media article composition apparatus (Figs. 1-2; pg. 6, l. 30 - pg. 8, l. 30) comprising:

one or more memory devices (50 in Fig. 2) storing, for each of a plurality of media elements (Fig. 2), metadata including:

related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects (pg. 2, l. 24; pg. 3, ll. 13-14), and

relationship data which indicates the type of relationship between what is represented by the respective media elements corresponding to the related media objects (pg. 2, ll. 25-27; pg. 3, ll. 13-14; Figs. 4A-5);

wherein the apparatus further comprises one or more digital processors (10 in Fig. 1) in communication with said one or more memory devices and operable to compose a media article (pg. 22, ll. 20-30) according to a template specifying the desired

characteristics of the media article and having a plurality of sections ("Section" in Fig. 6), at least one of which contains a query ("Query" in Fig. 6; pg. 16, ll. 6-14; pg. 17, ll. 6-20), by:

iteratively (steps 62-75 of Fig. 8; pg. 17, ll. 24-30) finding each section in the template and executing any query (step 62 of Fig. 8; pg. 17, ll. 24-30) in that section to return a selection of media objects each of which is associated with a corresponding media element; (step 64 of Fig. 8; pg. 17, l. 32 - pg. 18, l. 30)

analyzing the metadata of the selected media objects (step 66 of Fig. 8; pg. 18, l. 31 - pg. 20, l. 7); and,

arranging (steps 68-70) the media elements associated with the selected media objects, or identifiers thereof, in a media article in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis (pg. 20, l. 9 - pg. 21, l. 3).

## (VI) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 22-33 are "obvious" under 35 U.S.C. §103 based on Reber et al. (U.S. Patent No. 5,584,006; hereinafter "Reber") in view of Sweat et al. (U.S. Patent No. 5,619,636; hereinafter "Sweat").

#### (VII) ARGUMENT

### Claims 22-33 are not obvious over Reber in view of Sweat:

In order to establish a *prima facie* case of obviousness, all of the claim limitations must be taught or suggested by the prior art. The combination of Reber and Sweat fails to teach or suggest all of the claim limitations. For example, the combination of Reber and Sweat fails to teach or suggest "A method of automatically composing a media article according to a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query, the method comprising: iteratively finding each section in the template and executing any query in that section to return a selection of media objects... (emphasis added)" as required by independent claim 22 and its dependents. The combination of Reber and Sweat also fails to teach or suggest "wherein the apparatus further comprises one or more digital processors in communication with said one or more memory devices and operable to compose a media article according to a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a guery, by: iteratively finding each section in the template and executing any query in that section to return a selection of media objects each of which is associated with a corresponding media element...(emphasis added)" as required by independent claim 27 and its dependents.

There is clearly no disclosure in Reber of the use of any templates. Indeed, section 6 (page 3) of the previous Office Action (8/28/2009) admits "Applicant argues that Reber does not disclose any use of templates. *The Examiner has to agree with this* (emphasis added)."

Since "Reber does not disclose any use of templates" as admitted by the Examiner, Reber clearly does not further disclose "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" as required by claim 22 or "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" as required by claim 27. That is, Reber fails to disclose any use of a template and thus fails to disclose any use of a template containing a query.

Moreover based on the Examiner's admission that "Reber does not disclose any use of templates", Reber necessarily fails to further disclose "<u>iteratively</u> finding each section in the <u>template</u> and executing any query in that section to return a selection of media objects (emphasis added)" as further required by claim 22 or similarly required by claim 27.

As a further example that Reber fails to disclose a template containing a query (and hence subsequent limitations "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" and "iteratively finding each section in the template and executing any query in that section"), col. 11, lines 39-41 (specifically cited by the Final Office Action on page 3) of Reber merely states "The system offers the capability of dynamically linking the client of the media with the media available at the run time of the application. Such links are possibly different with..." There is no explicit or implicit mention of a query in this passage of Reber. There is nothing that even remotely suggests anything equating to a query. For example, a link (even if dynamic) is rather different than a query.

Sweat fails to resolve the above deficiency of Reber. Like Reber, Sweat does not teach or suggest templates or their use as required by the present claims.

In particular, the Office Action's allegation that the palette of Sweat corresponds to a template is incorrect. The palettes in Sweat do not store queries or anything remotely like a query which can be used to form the basis of a search for media elements, but rather icons each of which represents a particular function which can be dragged from the palette into the "iconic editor pane 68" and used to visually create an application in a similar way to the way in which visual BASIC programming is performed.

For example, Sweat explicitly discloses "FIG. 6 illustrates a module <u>palette</u> displayed on the monitor by the present invention; [and] FIG. 7 illustrates a tool <u>palette</u> displayed on the monitor by the present invention (emphasis added)." Even under a broadest <u>reasonable</u> interpretation <u>consistent with the specification</u> (see MPEP 2111), one of ordinary skill in the art would not interpret a template having a query (as claimed) to read on either of the "palettes" disclosed in Fig. 6 or Fig. 7, let alone interpret a template having a query which can be used to form the basis of a search for media elements to read on either of the "palettes" disclosed in Fig. 6 or Fig. 7.

Sweat also explicitly discloses "The present invention is similar to a drawing program, in that an operator works in windows displayed by the computer and creates objects by selecting them from *palettes* of icons (emphasis added)" in col. 2, lines 30-34. As discussed above, Sweat thus merely discloses icons, representing respective functions, which can be dragged from the palette. There is no teaching or suggestion of a template containing a query which can be used to form the basis of a search for media elements.

Page 3 of the final Office Action alleges "The Examiner further notes that whether a palette has a 'query' does not determine its status as a template." However, the clear and unambiguous language of claims 22 and 27 respectively recites "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" in claim 22 or "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" in claim 27. The template recited by the clear and unambiguous language of claims 22 and 27 thus requires a query. Accordingly, even if Sweat were to disclose a template (which it doesn't – as Sweat's palette of icons fails to teach or suggest a template), Sweat still fails to teach or suggest the template as claimed, which includes a template having a query which can be used to form the basis of a search for media elements.

Col. 4 lines 59-67 and col. 5, lines 1-2 (specifically cited by page 3 of the Final Office Action) of Sweat disclose the following:

"FIGS. 3 and 4 depict structures for storing the object and the container modules, respectively. The object module structure 42 includes a title/icon buffer 44 for storing a textual description and an icon representation, a 'type of module' buffer 46 containing information on whether the module comprises functional, video, audio, text, bitmap, animation, or still figure data, a 'connections' buffer 48 identifying to which other modules connection is made, a 'branching' buffer 50 for identifying any branching activity within the module, and a media or functional buffer 52 for storing digitized media or functional data."

The above passage of Sweat fails to disclose a template, let alone as template having a query as claimed. There is no explicit mention of "template" or "query" in this

passage, and the presence of connections buffer 48 does not turn any alleged template into a template containing a query.

Accordingly, even if Sweat and Reber were combined as proposed by the Office Action, the combination would not have taught or suggested all of the claim limitations.

The Advisory Action mailed November 15, 2010 alleges the following:

"Applicant's arguments appear to be a peicemeal (sic) analysis of the references. With this regard, the Examiner reiterates that Sweat teaches a palette system for modules while Reber teaches that these modules can contain queries. While the Examiner agrees that the word 'template' may not exist in the references, the concept of templates and their use does."

Appellant respectfully disagrees with the above-reproduced allegations of the Advisory Action. First, Appellant notes that "Examiner agrees that the word 'template' may not exist in the references (emphasis added)." Since "template" does not exist in the references (i.e., the *combination* of the Sweat and Reber references), the limitation "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" in claim 22 and "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" in claim 27 also does not exist in the cited references. This would be true even if the references are considered together -- in contrast to the Advisory Action's allegation of a piecemeal analysis. Likewise, since "template" does not exist in the references (i.e., the *combination* of the Sweat and Reber references), the limitation "iteratively finding each section in the template and executing any query in that section to return a selection of media objects (emphasis added)" in claim 22 and similar language of claim 27 also does not exist in the cited references.

With respect to the Advisory Action's allegation that "the concept of templates and their use does [exist in the references]", Appellant submits that independent claims 22 and 27 require more than "the concept of templates and their use." As noted above, claim 22 requires, for example, "a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query" and "iteratively finding each section in the template and executing any query in that section to return a selection of media objects...." Similar comments apply to independent claim 27.

The allegation that "Reber discloses that these modules can contain queries" is erroneous since there is no disclosure in Reber of a query, let alone that this non-existent query would have been used to modify Sweat. In particular, there is no explicit mention of a query in Reber, nor is there anything that even equates to a query. For example, a link (even if dynamic) is rather different that a query.

Moreover, even if Sweat and Reber were combined as proposed by the Office Action, the combination would also not have taught or suggested an *automatic* composition of a media article. Instead, this would still be done manually by a human editor. For example, in Reber, an editor chooses the order in which content is to be included in the final sequence. Sweat merely provides a tool which assists a user in composing a media article. Sweat does not contemplate that the computer will decide the order in which video clips are shown in a finalized application. There is also no teaching or suggestion of execution of a query to return a selection of media objects, analysis of the digital metadata of the returned/selected media objects, or any arrangement on the basis of the analysis of the metadata.

The Advisory Action alleges the following:

"Applicant argues that neither reference teaches 'automatic' composition of a media article. The Examiner submits that any computer-assisted method can be considered to be 'automatic.'"

Appellant respectfully disagrees that "any computer-assisted method can be considered to be 'automatic'" -- under a broadest reasonable interpretation consistent with the specification. For example, a global find-and-replace function activated by pointing and clicking on a particular button/icon in a word processing program results in an <u>automatic</u> find and replacement of a particular word, whereas a process in which a human user finds each instance of a word by manually reading a document displayed on a monitor and then manually typing the correction of the found word using the same word processing program is not automatic. In contrast to the Advisory Action's allegation, while both processes are assisted by a computer (the computer executing the word processing program), only the first process involves an <u>automatic</u> replacement of the particular word -- as would be commonly understood by one of ordinary skill in the art.

As discussed above, Reber's editor chooses the order in which content is to be included in a final sequence and Sweat merely provides a tool which assists a user in composing a media article. The combination of Reber and Sweat therefore does not teach or suggest an <u>automatic</u> composition of a media article, let alone teach or suggest executing a query to return a selection of media objects, analyzing the metadata of the returned/selected media objects, and arranging media elements associated with the media objects (or identifiers thereof) in a media article depending on the type of relationship of the related media objects (or identifiers thereof) as determined by the metadata analysis.

Claim 22 further requires analyzing the digital metadata of the selected media objects, which digital metadata includes: <u>related media object identity data</u> identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects, and <u>relationship</u> <u>data</u> which indicates the type of relationship between what is represented by the respective media elements corresponding to the related media objects." The related media object identity data and the relationship data are thus explicitly used by the analyzing step. This is not taught or suggested by the combination of Reber and Sweat.

The Advisory Action alleges the following:

"Applicant argues that the analysing step includes analysis of the 'related media object identity data.' However, the Examiner submits that the claim broadly states 'analyzing the digital metadata.'"

Appellant respectfully disagrees with the Advisory Action's allegation. For example, claim 22 explicitly recites:

"analyzing the digital metadata of the selected media objects, which metadata includes:

related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects...

wherein the method further comprises arranging the media elements associated with the selected media objects, or identifiers thereof, in a media article <u>in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis (emphasis added)."</u>

Accordingly, independent claim 22 explicitly requires "analyzing the digital metadata" and that that same analyzed data includes "related media object identity data."

The related media object identity data is therefore analyzed -- contrary to the allegations of the Advisory Action.

The analyzing of the related media object identity data of the digital metadata is confirmed by the remainder of the explicit claim language. Namely, claim 22 requires "related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects" and performing the claimed arranging "in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis." In other words, the claimed arranging is performed depending upon the type of relationship of the related media objects determined by the metadata analysis, and what is referred to as the related media objects (as determined by the metadata analysis) is the media object containing the related object identity data and the related media object.

Additionally, contrary to the apparent allegations of the Office Action, neither Reber nor Sweat teaches using any kind of relationship data to control the arrangement of the media as claim. For example, the portion (col. 4, lines 59-67 and col. 5, lines 1-2 of Sweat) specifically cited by the Final Office Action as teaching related media object identity data and relationship data actually just describes the data structure of the object modules used for storing media and associated data. None of this data could sensibly described as "relationship data which indicates the type of relationship between ... related media objects." It is therefore clear that this data cannot be used for the purpose of arranging media elements "in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as

determined by the metadata analysis" as required by claim 22 or similarly required by claim 27.

The Advisory Action alleges the following:

"Reber clearly teaches a table of relationship data (and the identity data) (see Figure 2). Further, as stated in the Final rejection mailed 19 April 2010, these elements have little to no effect on claim scope."

Appellant respectfully disagrees with the above allegations of the Advisory

Action. As opposed to elements which would allegedly "have little to no effect on claim scope", claim 22 explicitly and unambiguously requires "in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis." Claim 27 requires similar limitations. While Figure 2 of Reber discloses "table of relations between media," there is no teaching or suggestion of the above-noted, explicitly required, claim limitations. Instead, Reber discloses an editor who chooses the order in which content is to be included in the final sequence.

In more detail, computerized film editing systems like that disclosed in Reber must provide editors with some way to reference a given segment of recorded material. As Reber repeatedly points out (see, e.g., col. 4 lines 20-21), editors refer to segments of recorded material by specifying the physical source (e.g. tape A) and a range of time (e.g., from time code 2 hours 7 minutes to time code 3 hours 27 minutes – see column 10 lines 62 and 63).

Reber indicates that then conventional media archival methods stored data about the source of a media file at the time the media file was generated (e.g. by making a

digital recording of a pre-recorded piece of film). Presumably, this means that the user would type in a name for the source (e.g. tape A) and perhaps a time code indicating at what position on that tape the digital recording starts. As such, if another medium (e.g., videotape instead of film) had the same content on it, this relationship would have to be entered by the user when generating the media file from the videotape and when generating the media file from the problems discussed at col. 2 lines 16 to 25.

Reber purports to overcome these problems by using a "Source Manager" to record, in a database, equivalences between a source specified by the editor (e.g. "tape A, time code 2 hours 7 minutes to time code 3 hours 27 minutes"), and a media file. This is what is meant by col. 3 lines 53 and 54 cited by the Examiner. In addition, the Source Manager records the equivalence of content from different sources (see col. 8 lines 40 to 59). This enables the system to select, at the time the editor and producer generate a final sequence, a different, but equivalent source of a "clip" specified by the editor and producer for inclusion in that final sequence.

The above detailed explanation makes it clear that Reber and the presently claimed invention are fundamentally different. In Reber, an editor chooses the order in which content is to be included in the final sequence. Reber's apparatus provides a mechanism for finding a suitable physical source for that content. In contrast, claim 22 (for example) requires "A method of automatically composing a media article according to a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query, the method comprising... arranging the media elements associated with the selected media objects, or identifiers thereof, in a

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media article in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis."

### **CONCLUSION**

In conclusion it is believed that the application is in clear condition for allowance; therefore, early reversal of the Final Rejection and passage of the subject application to issue are earnestly solicited.

Respectfully submitted,

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#### (VIII) <u>CLAIMS APPENDIX</u>

1.-21. (Canceled)

22. A method of automatically composing a media article according to a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query, the method comprising:

iteratively finding each section in the template and executing any query in that section to return a selection of media objects each of which is associated with a corresponding media element and comprises digital metadata about its respective media element; and

analyzing the digital metadata of the selected media objects, which digital metadata includes:

related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects, and

relationship data which indicates the type of relationship between what is represented by the respective media elements corresponding to the related media objects;

wherein the method further comprises arranging the media elements associated with the selected media objects, or identifiers thereof, in a media article in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis.

- 23. A method according to claim 22 further comprising generating said related media object identity data and said relationship data.
- 24. A method according to claim 22 wherein said metadata of each media object further comprises content data indicating what is represented by the media object's corresponding media element, and wherein said step of iteratively finding and executing queries comprises selecting, from a plurality of media elements, one or more media elements in dependence upon said content data.
- 25. A method according to claim 22 wherein said arranging step arranges said media elements so as to determine the order in which the user sees or hears what is represented by the selected media elements.
- 26. A method according to claim 22 in which said media elements contain video data.
  - 27. A media article composition apparatus comprising:

one or more memory devices storing, for each of a plurality of media elements, metadata including:

related media object identity data identifying a related media object, the media object containing the related media object identity data and the related media object being referred to as related media objects, and relationship data which indicates the type of relationship between what is represented by the respective media elements corresponding to the related media objects;

wherein the apparatus further comprises one or more digital processors in communication with said one or more memory devices and operable to compose a media article according to a template specifying the desired characteristics of the media article and having a plurality of sections, at least one of which contains a query, by:

iteratively finding each section in the template and executing any query in that section to return a selection of media objects each of which is associated with a corresponding media element;

analyzing the metadata of the selected media objects; and, arranging the media elements associated with the selected media objects, or identifiers thereof, in a media article in dependence upon the type of relationship of the related media objects forming some or all of the selected media objects, or identifiers thereof, as determined by the metadata analysis.

- 28. An apparatus according to claim 27 in which said relationship data indicates a causal type of relationship between what is represented by one media element and what is represented by the related media element.
- 29. An apparatus according to claim 27 wherein said one or more processors are further operable to provide a user with an interface enabling the user to enter said relationship data.

30. An apparatus according to claim 27 wherein:

said metadata is stored in a database; and

said one or more processors are further operable to query said database to obtain identifiers of media elements whose associated metadata meets one or more conditions specified in said query.

- 31. An apparatus according to claim 30 in which said database comprises an object-oriented database and metadata for each media element is stored as an object in said object-oriented database.
- 32. An apparatus according to claim 27 further comprising a content store storing a plurality of media elements, said metadata for each media element including a pointer to the location of said media element in said content store.
  - 33. An apparatus according to claim 27 wherein:

said template lists a plurality of slots to be filled, and, for each slot, one or more associated requirements of media elements for filling said slot; and

said one or more processors are further arranged in operation to select media elements by, for each of said slots, retrieving one or more identifiers of media elements whose metadata accords with said one or more requirements for said slots.

# (IX) EVIDENCE APPENDIX

None.

# (X) RELATED PROCEEDINGS APPENDIX

None.